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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/290,645	04/12/1999	RUDOLF BOLLE	YO999-159	1122

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EXAMINER

SMITHERS, MATTHEWS

ART UNIT	PAPER NUMBER
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2134

DATE MAILED: 06/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Am

Office Action Summary

Application No.

09/290,645

Applicant(s)

BOLLE ET AL.

Examiner

Matthew B Smithers

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-10 and 15-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,5,9,10 and 15-33 is/are rejected.
- 7) ☒ Claim(s) 6-8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:



DETAILED ACTION

Status of Claims

Claims 2-3 and 11-14 were canceled.

Claims 1, 4-7, and 15-18 were amended.

Claims 20-33 were added.

Claims 1, 4-10 and 15-33 are pending.

Response to Arguments

Applicant's arguments with respect to claims 1, 4-10, and 15-33 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

Claims 26-29 are objected to because of the following informalities:

Claims 26 and 27 are business process claims that are dependent on method claim 15.

Claims 28 and 29 are method claims that are dependent on business process claim 17. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 4-5, 9-10, and 15-33 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. patent 6,332,193 granted to Glass et al.

Regarding claim 1, Glass meets the claimed limitations as follows:

“A system for generating a response from an acquired signal and a challenge, the system comprising:

an acquisition device creating a signal representation of said acquired signal; and

a responder that receives a challenge and generates said response that is a function of said signal representation, wherein said function is defined by said challenge.” see abstract; column 8, line 53 to column 10, line 58.

Regarding claim 4, Glass meets the claimed limitations as follows:

“A system, as in claim 1, where the signal is one or more of the following: a biometric signal, a fingerprint image, a face image, an iris image, an audio signal, and a speech signal.” see abstract.

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Regarding claim 5, Glass meets the claimed limitations as follows:

“A system, as in claim 1, where the acquisition device is one or more of the following: a camera, a biometrics sensor, a semiconductor-based fingerprint sensor, a micro-mechanical sensor, and a microphone.” see abstract.

Regarding claim 9, Glass meets the claimed limitations as follows:

“A system, as in claim 1, where the responder function includes one or more of the following: a checksum, a pseudo-random sample, a block of contiguous samples, and a function of selected samples of the signal.” see column 7, lines 3-33.

Regarding claim 10, Glass meets the claimed limitations as follows:

“A system, as in claim 1, where the acquisition device and the responder are both located on a single semiconductor chip.” see column 5, lines 13-41.

Regarding claim 15, Glass meets the claimed limitations as follows:

A method for authenticating one or more acquired signals, comprising the following steps:

creating a representation of one or more input signals;

creating challenges;

creating responses that are a function of the input signals and the challenges; and

verifying the responses by comparing them to the function of the input signals and the challenges.” see abstract; column 8, line 53 to column 10, line 58.

Regarding claim 16, Glass meets the claimed limitations as follows:

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“A computer product for authenticating one or more acquired signals that performs the

following steps:

creating a representation of one or more input signals;

creating challenges;

creating responses that are a function of the input signals and the challenges; and

verifying the responses by comparing them to the function of the input signals and the challenges.” see abstract; column 8, line 53 to column 10, line 58.

Regarding claim 17, Glass meets the claimed limitations as follows:

“A business process for authenticating one or more acquired signals, the process comprising the steps of:

creating a representation of one or more input signals;

creating challenges;

creating responses that are a function of the input signals and the challenges; and

verifying the responses by comparing them to the function of the input signals and the challenges.” see abstract; column 8, line 53 to column 10, line 58.

Regarding claim 18, Glass meets the claimed limitations as follows:

“A business process, as in claim 17, where the input signals include any one or more of the following: one or more fingerprints, face, iris, and voice.” see abstract.

Regarding claim 19, Glass meets the claimed limitations as follows:

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“A business process, as in claim 17, where the challenge response functions include any one or more of the following: signal values at discrete points, a mathematical function of discrete signal values, a hash of the signal values, and a checksum of the signal values in a delimited area.” see column 5, line 62 to column 6, line 9.

Regarding claim 20, Glass meets the claimed limitations as follows:

“A system for authenticating an acquired signal, comprising:
a challenge generator for generating a challenge; and
a verifier for authenticating a received signal by comparing a function of the acquired signal, wherein said function is defined by said challenge, to a response generated as a result of said challenge.” see abstract; column 8, line 53 to column 10, line 58.

Regarding claim 21, Glass meets the claimed limitations as follows:

“A method for authenticating an acquired signal, comprising the following steps:
creating a challenge; and
authenticating a received signal by comparing a function of the acquired signal,
wherein said function is defined by said challenge, to a response generated as a result of said challenge.” see abstract; column 8, line 53 to column 10, line 58.

Regarding claim 22, Glass meets the claimed limitations as follows:

“A computer product for authenticating an acquired signal that performs the

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following steps:

creating a challenge; and

authenticating a received signal by comparing a function of the acquired signal,

wherein said function is defined by said challenge, to a response generated as a result of said challenge.” see abstract; column 8, line 53 to column 10, line 58.

Regarding claim 23, Glass meets the claimed limitations as follows:

“A system, as in claim 1, wherein said challenge identifies said function from two or more functions.” see column 9, lines 21-25.

Regarding claim 24, Glass meets the claimed limitations as follows:

“A system, as in claim 1, wherein said challenge identifies one or more parameters of said function.” see column 9, lines 21-25.

Regarding claim 25, Glass meets the claimed limitations as follows:

“The system, as in claim 1, wherein said signal representation can be verified by comparing said response to said function of the signal representation and the challenge.” see column 9, lines 40-52.

Regarding claim 26, Glass meets the claimed limitations as follows:

“A business process, as in claim 15, wherein said challenge identifies said function from two or more functions.” see column 9, lines 21-25.

Regarding claim 27, Glass meets the claimed limitations as follows:

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“A business process, as in claim 15, wherein said challenge identifies one or more parameters of said function.” see column 9, lines 21-25.

Regarding claim 28, Glass meets the claimed limitations as follows:

“A method, as in claim 17, wherein said challenge identifies said function from two or more functions.” see column 9, lines 21-25.

Regarding claim 29, Glass meets the claimed limitations as follows:

“A method, as in claim 17, wherein said challenge identifies one or more parameters of said function.” see column 9, lines 21-25.

Regarding claim 30, Glass meets the claimed limitations as follows:

“A system, as in claim 20, wherein said challenge identifies said function from two or more functions.” see column 9, lines 21-25.

Regarding claim 31, Glass meets the claimed limitations as follows:

“A system, as in claim 20, wherein said challenge identifies one or more parameters of said function.” see column 9, lines 21-25.

Regarding claim 32, Glass meets the claimed limitations as follows:

“A method, as in claim 21, wherein said challenge identifies said function from two or more functions.” see column 9, lines 21-25.

Regarding claim 33, Glass meets the claimed limitations as follows:

“A method, as in claim 21, wherein said challenge identifies one or more parameters of said function.” see column 9, lines 21-25.

Allowable Subject Matter

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Claims 6-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

With respect to claims 6-8, the cited prior art fails to specifically disclose the responder has two or more selectable functions, where the functions are being selected by one or more configuration inputs and the functions are modifying the challenge.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew B Smithers whose telephone number is (703) 308-9293. The examiner can normally be reached on Monday-Friday (9:00-5:30) EST.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (703) 305-1830. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

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Matthew B Smithers
Primary Examiner
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June 16, 2003